ACTIFS PRÉCIEUX

ATELIER | EXTRACTION | SÉLECTIVE

BOSWELLIA SACRA

RARE AND PRECIOUS INGREDIENT

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BOSWELLIA SACRA

RARE AND PRECIOUS INGREDIENT

At one time, Frankincense Boswellia Sacra was worth it's weight in gold, and it's still rare and precious commodity.
Frankincense Boswellia Sacra, dried resin from desert tree in Southern Arabia grows typically in Oman, it is an aromatic resin that is often used in perfumes and incense.

It has a woody, spicy smell and can be inhaled, absorbed through the skin, steeped into a tea or taken as a supplement.

Used in Ayurvedic medicine for hundreds of years, frankincense appears to offer certain health benefits, from improved arthritis and digestion to reduced asthma and better oral health. It may even help fight certain types of cancer.

Frankincense has a history dating back thousands of years.
It has been traded in Northern Africa and the Arabian Peninsula for approximately five thousand years. Frankincense has also been depicted in ancient Egyptian murals.
The ancient Romans and Greeks are also known to have imported large amounts of frankincense resin to burn as incense and use during cremation ceremonies.

ACTIFS PRÉCIEUX

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BOSWELLIA SACRA

TOTAL EXTRACT

AP 502

ACTIFS PRÉCIEUX

ATELIER | EXTRACTION | SÉLECTIVE

BOSWELLIA SACRA
TOTAL EXTRACT

AP 502

Raw material	Frankicense Boswellia Sacra
Production process	By supercritical fluid extraction using natural carbon dioxide as a solvent. No solvent residues, no inorganic salts, no heavy metals, no reproducible microorganisms.
D/e – ratio	12 - 18 kg raw material yield 1 kg product.
Description	Contains all CO2-soluble lipohilic components.
Appearance	Contains mainly volatile components. Golden-yellow, liquid, clear oil
Declaration	INCI-NAME: Boswellia Sacra (Frankincense) Extract Cas-no: 8050-07-5 , 80-56-8 , 5989-27-5.
Properties	Anti-inflammatory and a stimulatory activity on the metabolism of collagen and elastin[4] Softens the face's lines and relaxes the skin[3] Increases elasticity, reduces photo-aging and decreased excretion of sebum. **Dosage 0.05 – 2 %**
Naturalness	The product is 100 % natural . the product is manufactured from the named raw material no additives and no other technical adjuncts, it is not blended and not formulated.
Stability	Unopened container under cool and dry storage conditions and exclusion of light at least 2 years.

BENEFITS TO THE SKIN

POWERFUL INGREDIENT

Boswellia sacra has a reputation as a powerful ingredient in skin, body and hair care. It is wonderful for the skin. Its extract is both cicatrizing and cytophylactic.

Using it in a facial cream for wrinkles too, Frankincense has many benefits towards the skin, such as reducing the appearance of mature skin and scars due to its ability to repair skin cells.

Sacra supercritical extract contains the largest amount of alpha-pinene, Sacra incense has been shown to be highly antimicrobial.
Sacra incense is also able to act as an anti-inflammatory.

It is skin healing and effective on boils, acne and scarring on the skin as well as to assist stretch marks to fade.

Being cytophlactic, it promotes the regeneration of healthy cells and keeps the existing cells and tissues healthy. Also effective as an antiseptic on wounds and cuts.

SOLUBILITY

Boswellia extract contains Boswellic Acid and its derivatives needs to be dissolved or dispersed in a suitable carrier such as fatty alcohols or fatty acids, which help to incorporate the extract or acid into compositions suitable for use on skin or hair and improve the stability of products containing the extract.

DOSAGE

The recommended dose of *Boswellia* extract or Boswellic Acid in a cosmetic product range from **0.05%** to **2%**.

THE FRANKINCENSE RESIN IS COMPOSED OF ESSENTIAL OIL **(5–15%),** MUCUS-LIKE CLUSTER **(12- 23%)** AND A LIPOPHILIC PART **(55–66%),** THE LIPOPHILIC PART COMPRISES OF RICH TERPENOIDS AMONG WHICH ARE THE MEDICINALLY IMPORTANT GROUP OF **BOSWELLIC ACIDS** (BAS).

BOSWELLIC ACIDS

Boswellia sacra is a good source of high quality frankincense and bioactive compounds having a wide range of vital biological activities. The frankincense, oleo-gum resin and its essential oil have been well-known for their ameliorative effects against skin disorders[2].

The frankincense resin is composed of essential oil (5–15%), mucus-like cluster (12– 23%) and a lipophilic part (55–66%), the lipophilic part comprises a rich amount of terpenoids, among which are the medicinally important group of **boswellic acids** (BAs).

Boswellic acids were identified as principal compounds of Boswellia extracts with an anti-inflammatory potential.

Boswellic acid is very benefic for the skin; it softens the face's lines and relaxes the skin[3].

Patients with psoriasis, scales and erythema have seen remarkable improvement of the skin using creams with boswellic acid.

Inducing boswellic acids in cosmetic products have significative betterment on touch roughness and fine lines, **increases elasticity, reduces photo-aging and decreased excretion of sebum**.

In in-vitro and in-vivo studies, BAs have shown various inhibitory effects on pro-inflammatory molecular pathways and a **stimulatory activity on the metabolism of collagen and elastin**[4].

CLINICAL

Clinical evaluation of the efficacy and tolerability of a cream containing BAs in the treatment of photoaged skin of the face with noninvasive diagnostic techniques showed that a cream containing a low (0.5%) concentration of BAs was found well tolerated and effective with a significant persistent improvement of the Dover's global score for photoaging and scores of selected features of photodamaged skin, fine lines and tactile roughness.

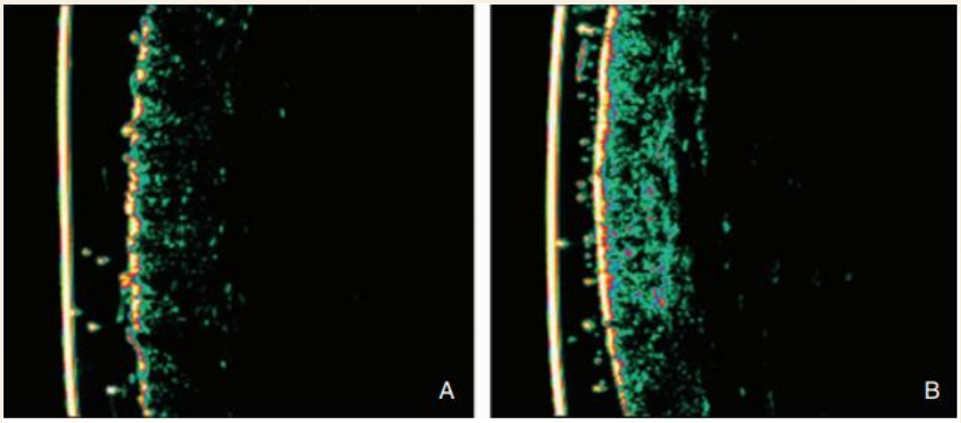

FIG. 1: A. Ultrasound (US) at the baseline (T0). B. US after the treatment (T1) There was an improvement of echogenicity of the dermis (increase of the skin thickness and pixel count)[5].

Echography showed an increase of the number of pixels and skin thickness suggesting a reshaping and a new deposition of collagen and elastic fibers. The increase of skin distensibility suggests an increase of functional elastic fibers as well.

These effects of BAs can be related to both their **anti-inflammatory activities and the stimulatory activity on the metabolism of collagen and elastic fibers**.

ANTIMICROBIAL ACTIVITY

Biofilms are a multilayered community of bacterial cells. Staphylococci are known to form biofilms on an implanted medical device or damaged tissues, which are difficult to disrupt.

The infections caused by biofilms are difficult to treat due to their inherent antibiotic resistance, in a study, boswellic acids was found to effectively inhibit the staphylococcal biofilm and also reduced the performed biofilm of these bacterial pathogens.

It showed that boswellic acids have very potent antimicrobial activity against *Staphylococcus aureus* and *Staphylococcus epidermidis*[6].

BOSWELLIA SACRA

FROM SACRED INCENSE TO SKIN CARE INGREDIENT

Boswellia sacra extract, also possesses anti-cancer activity that can potentially provide non-surgical and non-invasive treatment option for Basal Cell Carcinoma by topical application[13].

BCC: **basal-cell carcinoma** is the most common form of skin cancer.

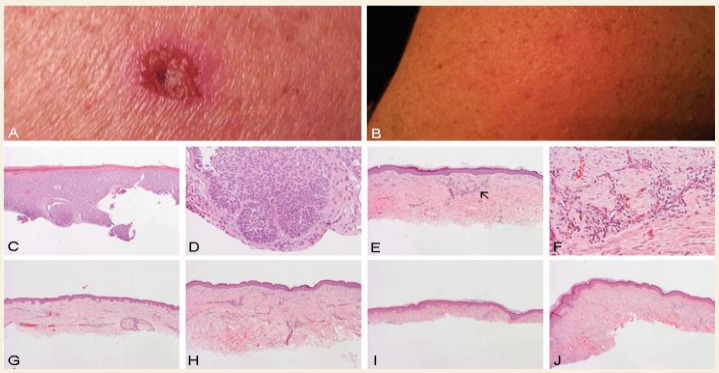

Fig 2: Carcinoma on t he arm. (A) Original lesion before treatment. (B) Image taken at three months and one week of local application of frankincense essential oil and the lesion has completely disappeared. (C) and (D) A biopsy performed before treatment, which shows BCC with nodular growth pattern. (E–J) Serial sections of the biopsy performed after treatment shows extensive scar formation, but no residual BCC. A small amount of inflammatory cells (arrow in E) is present and is illustrated in higher magnification in (F).

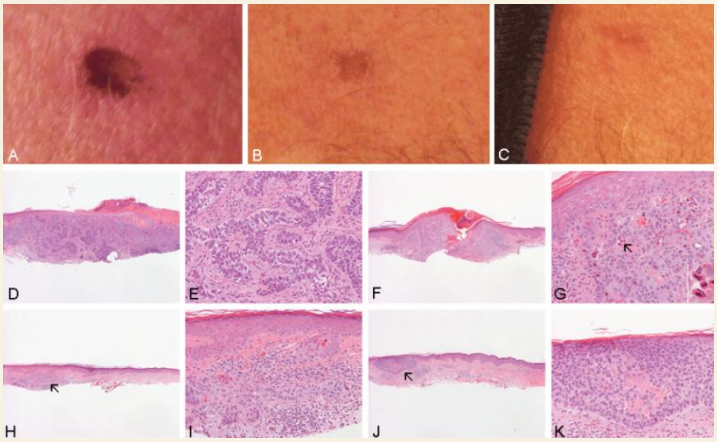

Fig 3: Carcinoma on t he chest. (A) Original lesion before treatment. (B) and (C) Images of lesion taken at three and four months after treatment, respectively, show progressively regression. (C) and (D) A biopsy taken before treatment shows BCC with an infiltrative growth pattern. (F–K) Serial sections are performed in the post-treatment lesion. Many pyknotic/apoptotic cells (arrow and inset in G) are present. Note that the residual BCC (arrows in (H) and (J) are located adjacent to areas with extensive scarring.[13]

With more understanding of biological compounds and mechanistic actions, frankincense essential oil can be a safe and effective alternative therapeutic agent for treating BCC through topical administration.

More importantly, topical application of frankincense essential oil did not cause side effects during the entire course of the treatment. With a complex chemical constituent in frankincense essential oil, many components may work synergistically to provide a potent anti-cancer activity[13].

IT HAS A DEEP, RICH,
GROUNDING AROMA
WHICH TOUTS THE ABILITY
TO QUIET THE MIND,
SUPPORT FOCUS AND
ENCOURAGE TRANQUILITY.

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BOSWELLIA SACRA

SELECTIVE EXTRACT

AP 602

ACTIFS PRÉCIEUX

ATELIER | EXTRACTION | SÉLECTIVE

BOSWELLIA SACRA
SELECTIVE EXTRACT

AP 602

Raw material	Frankicense Boswellia Sacra
Production process	By supercritical fluid extraction using natural carbon dioxide as a solvent. No solvent residues, no inorganic salts, no heavy metals, no reproducible microorganisms.
D/e – ratio	20 - 30 kg raw material yield 1 kg product.
Description	Contains mainly volatile components.
Appearance	Light-yellow, liquid, clear oil
Solubility	Soluble in alcohol and fixed oil
Declaration	INCI-NAME: Boswellia Sacra (Frankincense) Extract Cas-no: 8050-07-5 , 80-56-8 , 5989-27-5.
Properties	The olibanum oil has excellent fragrances and serves as the base ingredient in perfumes and after shaves[8]. It becomes more aromatic with age. It is often used in perfumery for its lemony, woody and spicy notes.
Special Use Instructions	Dilute before use
Naturalness	The product is 100 % natural . the product is manufactured from the named raw material no additives and no other technical adjuncts, it is not blended and not formulated.
Stability	Unopened container under cool and dry storage conditions and exclusion of light at least 2 years.

BOSWELLIA SACRA

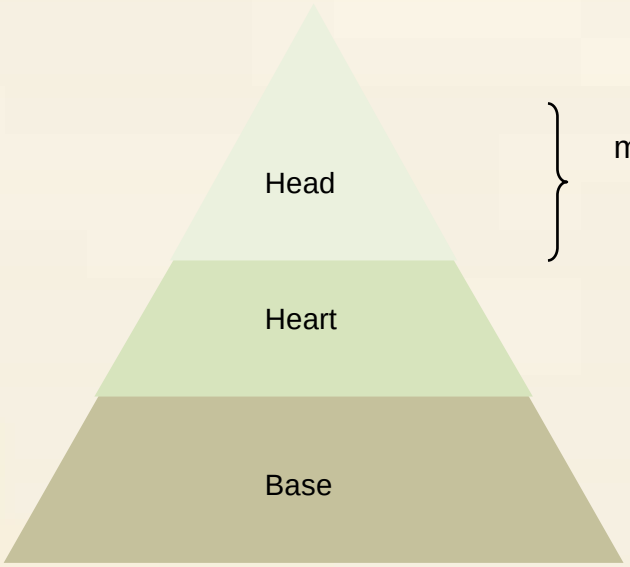
SELECTIVE EXTRACT

ACTIFS PRÉCIEUX Selective extraction process captures a range of chemical constituents not present in steam distilled essential oil.

The extraction of olibanum selective extract with our process showed a high proportion of monoterpenes in which α-pinene and limonene were the major constituents with an amount of 72.33% and 5.14% respectively, the remaining was accounted by sesquiterpenes in which ß-elemene was the major constituents. Unlike the analysis of the Frankincense's volatile oil obtained by hydrodistillation which reported the absence of sesquiterpenes in Boswellia sacra and low amount of α-pinene (5.3%).

It has a characteristic odor that is predominately due to a mixture of complex sesquiterpenes, yet α-pinene and limonene are known as odorous constituents. It was shown that the odorant profile of B. sacra gum resin is dominated by mono- and sesquiterpenes, often oxygenated [5].

In perfumery, frankincense oil is used as a fixative and for its fresh balsamic, dry, resinous, somewhat green note in oriental bases, ambers, florals, colognes, and male fragrances. It is used in the oriental bases, ambres, "powder" perfumes, floral perfumes, citrus colognes, spice blends, violet perfumes, and male fragrances. It blends well with spice oils, labdanum, mimosa, neroli, muguet bases, woody notes, and other balsamic notes[6].



Citrus notes:
monoterpenes such as
limonene / α-pinene

Woody (old church) notes
Non volatiles compounds:
Olibanic acids

Olfactory pyramid of *B.sacra* uses in perfumery

ACTIFS PRÉCIEUX

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AVAILABILITY

Dec	Jan	Feb
Mar	Apr	May
June	July	Aug
Sept	Oct	Nov

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